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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,175	04/27/2000	Wataru Matsumoto	2611-0125P	2265

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EXAMINER

HARPER, KEVIN C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/559,175

Applicant(s)

MATSUMOTO ET AL.

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Response to Arguments***

Applicant's arguments filed November 9, 2005 have been fully considered but they are not persuasive. Applicant argued that Applicant's admitted prior art does not recite transmission time periods for data transmitted on a transmission path. However, the symbols of fig. 25 are transmitted during a time period associated with FEXT or NEXT (page 10, lines 19-23; page 11, lines 3-9; fig. 24, "ATU-C transmit DMT symbol" as related to "ATU-R Cross-talk").

The indicated allowability of claims 9-10, 13-16 and 24-30 are withdrawn and a new ground(s) of rejection is made in view of Applicant's admitted prior art.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-30 are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art as described in figs. 19-25 and pages 1-13 of the specification.

1. Regarding claims 1-18, 20-21, 23-25, 27-28 and 30, Applicant's admitted prior art discloses a communication system method (fig. 21; page 6, line 22 through page 7, lines 2 and page 4, lines 23-25) which sets a data transmission time which is the time suitable for data transmission in a period (fig. 24, any one symbol period during FEXT using bitmap A; fig. 25) and a quasi-data transmission time not during the data transmission time in the same period (any other one symbol period during FEXT using bitmap A), in accordance with a network

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transmission path (fig. 20, item 13). Bits are assigned such that data for the period can be transmitted uniformly over the corresponding period (page 10, lines 19-25; page 11, lines 21-23; page 12, lines 5-13; note: a uniform incoming bit stream before rate conversion is transmitted uniformly during the transmission of each symbol using bitmap A). Further regarding claims 3-4, 7-8, 11-12 and 15-16, a symbol of a second set (e.g. fig. 25, symbol 1) is transmitted where a symbol of a first set of another period has not been assigned (e.g. symbol 0) within the same period. The data is time multiplexed on a transmission line (figs. 20 and 25). Further regarding claims 5-8 and 13-16, the data transmitted within the time period is received and reproduced accordingly (fig. 20, ATU-R; page 9, lines 8-17). Further regarding claim 17, the communication system includes a transmission device (fig. 20, item ATU-C).

2. Regarding claims 19 and 26, the first transmission time represents far-end crosstalk time (fig. 25, FEXT).

3. Regarding claims 22 and 29, the communication system is capable of assigning bits uniformly over the far-end crosstalk time and near-end cross talk time (fig. 21, items 47-50; page 9, lines 8-9; page 9, line 24 through page 13, line 21 as compared to page 30, line 7 through page 36, line 11; note: only the operating characteristics of the prior art communication system need to be changed to implement the present invention-- MPEP 2114).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

January 22, 2006



**FRANK DUONG**  
**PRIMARY EXAMINER**